>60g

CRUISE REPORT

U.S.C.G. BUOY TENDER SASSAFRASS

JAN. 14-17, 1976

U.S. GEOLOGICAL SURVEY

Brad Butman, USGS.

Ship: U.S.C.G. Cutter SASSAFRAS

Cruise No: N/A

Area of Operation: Middle Atlantic Bight

(New York, N.Y. to Cape May, N.J.)

Dates of Operation: January 14-17, 1976

Personnel:

Brad Butman (U.S.G.S., Chief Scientist)

Dave Folger (U.S.G.S., Chief Scientist)

Phil Shea (U.S.G.S.)

Andy Eliason Data Service)

Purpose and Summary:

The objective of the SASSAFRASS cruise was to recover three bottom instrument packages deployed on the Mid-Atlantic continental shelf (Figure 1). The SASSAFRASS was kindly made available to U.S.G.S. by the U.S. Coast Guard for the recovery. One of the three packages was recovered (Tripod JERRY). Tripods CINDY and DEBBIE were located with the AMF range bearing system, but the primary recovery systems failed. In the case of CINDY, the recovery balls released and were recovered, but the recoverey line was severed. Difficulty was encountered setting CINDY during rough weather, and the severed line was expected. Extensive grappling efforts were made to recover CINDY; the tripod was hooked but was lost in lifting off the bottom. Time did not allow further grappling. In the case of tripod DEBBIE, the release activated, but no balls were observed at the surface; the failure was probably due to a fouled rope canister. The tripod was upright with one month additional data capacity remaining, and thus no effort was made to grapple until better grappling gear and additional time was available.

Sassagrass

Further attempts to recover CINDY and DEBBIE are planned.

<u>Narrative</u>:

Jan. 14 - 0800

Depart Governor's Island, N.Y. Coast Guard Base. Diverted from cruise plan to escort disabled USS DASH back to New York Jan. 15

Work Coast Guard Buoy. 1830, on station, tripod CINDY. Surface buoy intact, light functioning.

Fire release, recover floatation with severed line.

Dragged for tripod - 5 hours. Hooked tripod and tipped over but could not lift off bottom.

Jan. 16 - 0100 Underway to tripod DEBBIE

0800 Fire release, no balls on surface

O845 Underway to JERRY. No time to attempt dragging operations.

0945 Fire release, balls sighted

1030 JERRY on deck

1300 Return to DEBBIE, no floatation

Jan. 17 - Work buoys

1700 Arrive Cape May, N.J.

Tripod JERRY - General condition upon recovery and comments

All painted surfaces of frame and sediment trap covered with brown material, with stringy white algae like growth on top. Brown deposit probably electrolytic action on paint, but possibly biological deposit. Camera gear, current meter, release and rope canister had some filament like growth, but no brown covering. No growth on camera lense window.

Anodes on camera gear, current meter and frame all heavily depleted.

Anodes on release, little action. All fasteners in good condition with

little erosion. Cases of camera, battery, strobe - spot corosion, orange rust in color.

Strobe flooded. End cap pushed out by pressure. O-ring extruded.

Batteries disintegrated. Bulb end shattered. No obvious damage to O-ring.

Sediment traps closed on surface. Some material in each jar. Appears coarse. Traps jammed open when lids raised. Nico press fittings on sediment trap weight in good shape. Rubber on traps discolored to light tan. White deposits on aluminum in several places. Jar lids 23", 43" and 62-1/2" respectively from bottom as measured on deck. Samples frozen for analysis.

Anchor chain to Danferth anchor in good condition.

Chain to glass balls in good condition with little wear and little action in anode.

One leg bent on deployment. Sediment trap leg slightly askew.

Tabulated Information:

a.	Number of days at sea	3
b.	Number of working days	1
c.	Total ship track	230 nm
d.	km of continuous data	N/A
e.	Number of stations	N/A
f.	Number of each sample type	N/A
g.	Instrumentation recovered	1 Tripod

Figure 1 - Location of tripods

